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EXAMINER

WYROZEBSKI LEE, KATARZYNA I

ART UNIT PAPER NUMBER

1714

DATE MAILED: 01/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

AS

**Office Action Summary**

Application No.

10/086,173

Applicant(s)

KNUDSON ET AL.

Examiner

Katarzyna Wyrozebski Lee

Art Unit

1714

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 101-160 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 101, 102, 104-113, 116, 117, 119-128, 131-137, 139-147, 149-152 and 154-159 is/are rejected.
- 7) ☒ Claim(s) 103, 114, 115, 118, 129, 130, 138, 145, 148, 153 and 160 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

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In view of the amendment filed on 10/16/2003 following office action is second non-final action, since the examiner did not reject all the claims that should have been rejected by the prior art of ROSS. Any inconvenience is deeply regretted. The examiner acknowledges cancellation of claims 1-100 and addition of claims 101-160. Newly added independent claim 131 is still rejectable over the prior art as applied in the first office action as it shadows original claim 1. Newly added independent claims 101 and 116 further limited polymeric component to negatively charged polymer.

After careful review of the application, the applicants are also requested, per rules of the MPEP to insert the domestic priority date at the beginning of the specification.

***Claim Rejections - 35 USC § 102***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 131, 132, 134-137, 139, 141-144, 146, 147, 149-152, 154, 156-159 are rejected under 35 U.S.C. 102(e) as being anticipated by ROSS (US 6,380,295).

The discussion of the disclosure of the prior art of ROSS from paragraph 4 of the office action mailed on 6/5/2003 is incorporated here by reference. The prior art of ROSS teaches the

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limitations of the newly added claims, since these claims contain limitations of the original claims rejected previously.

3. Claims 101, 102, 104-113, 116, 117, 119-128, 131, 132, 134-137, 139-144, 146, 147, 149-152, 154-159 are rejected under 35 U.S.C. 102(e) as being anticipated by POWELL (US 3,271,298).

The prior art of POWELL as it is disclosed in the example 1-8 of the prior art teaches process for making organoclay. According to process of POWELL the clay is first treated with anionic polymer of the acrylate family, subjected to high shear and then treated with quaternary ammonium compound. According to TABLE I (col. 4) the amount of clay is less than 10 % by weight. The anionic polymer is utilized in amount of 0.1-1.0 % by weight of clay (col. 3, lines 50-53).

Clays utilized by POWELL are smectite clays, which are selected from group consisting of hectorite, montmorillonite, bentonite, beidelite, saponite, stevensite and the like (col. 3, lines 1-5).

The ammonium compound utilized in the example of POWELL is dimethyl hydrogenated tallow-2-ethylhexyl ammonium sulfate, wherein tallow component is oily component. Underneath the TABLE I, it is disclosed that the amount of ammonium compound utilized to treat the clay surface is 3.4 wt % for example F, and 4.6 wt % for example H (col. 5, lines 1-9) based on the weight of clay.

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In the light of the above disclosure, the prior art of POWELL anticipates newly added claims rejected above.

*Allowable Subject Matter*

4. Claims 103, 114, 115, 118, 129, 130, 138, 145, 148, 153, 160 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record does not teach or suggest using hydrotalcites as flocculating agent. The prior art of record also does not teach or suggest using styrene-butadiene, polyvinyl chloride, chlorosulfonated polyethylene rubber, fluoroelastomer or polyisoprene in negatively charged polymer latex.

In the amendment filed on 10/6/2004 the applicants argued following:

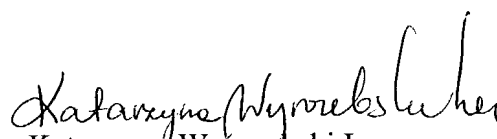
The applicants have stated that the newly added claims contain limitations that have been previously part of the objected claims.

The examiner agrees, however, the claims that were incorporated into independent claims should have been rejected by the prior art of ROSS. Also to reject newly added claims reciting negatively charged polymer, prior art of POWEL is applied.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katarzyna Wyrozebski Lee whose telephone number is (571) 272-1127. The examiner can normally be reached on Mon-Thurs 6:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

  
Katarzyna Wyrozebski Lee  
Primary Examiner  
Art Unit 1714

kiwl  
January 24, 2004